

REMARKS

Applicant thanks the Examiner for the telephone interview of March 4, 2004 in which the changes to claim 1 of this Amendment and their differences over the Metzger patent were discussed.

Reexamination and reconsideration of the application as amended are requested. Support for adding the "500-2500 fpm" language in claim 1 is found in canceled claim 6. Support for adding the "heating only by one or more directed and heated gas flows" language in claim 1 is found in figure 1. Support for adding the "when the workpiece is otherwise stopped" language in claim 1 is found in the specification, page 10, lines 7-10. Support for adding the "substantially the same temperature and velocity" language in claim 10 is found in canceled claim 11.

The Examiner's rejection of claims 1, 5, 9-10, and 12 as being "obvious", under 35 U.S.C. 103, is respectfully traversed. The Examiner rejects these claims as being unpatentable over Faraoni '531 or Arakawa '857 in combination with Metzger '279. Claims 5, 9-10, and 12 depend from claim 1. Claim 1 requires performing a preheating step of directing a first heated gas flow to impinge on the workpiece at a velocity of generally 500-2500 feet-per-minute while the workpiece is rotating but is otherwise stopped, wherein the workpiece is heated above ambient only by one or more directed and heated gas flows.

The examiner alleges it would have been obvious to substitute the air jets 32 of the drying and curing section 24 of the apparatus 10 of Metzger for the ovens of Faraoni or Arakawa to arrive at applicant's claimed invention. Applicant respectfully disagrees.

Metzger does not rotate the workpiece when the workpiece is otherwise stopped during his heating step as required by Applicant's claim 1. Metzger does not use only one or more directed and heated gas flows to heat his workpiece above ambient (he also uses a radiant heat source 36 as seen from the figure and from column 4, lines 64-65) as required by Applicant's claim 1. Metzger does not use a heated gas flow having an impinging velocity of between generally 500 feet per minute (fpm) and 2500 fpm (he uses 6,000 to 8000 fpm as seen from column 5, lines 27-30).

Faraoni only rotates the component 12 during the trickle operation (column 4, lines 12-22) which is done to achieve uniform distribution of the resin over the coils. Faraoni, which uses separate preheating and coating conveyors 24 and 34, does not teach, suggest or describe rotation of a workpiece during preheating or, more specifically, rotation of a workpiece which is otherwise stopped during preheating as required by applicant's claims. Likewise, Arakawa, which appears from figure 2 to use a single conveyor for preheating and coating, does not teach, suggest or describe that the rotation of the workpiece during trickling (and hence during preheating since a single conveyor is used) occurs when the workpiece is otherwise stopped as required by applicant's claims as figure 3 suggests that each workpiece continuously moves under and past the three trickle dispensers. It is noted that workpiece rotation in Faraoni and Arakawa, which preheat using ovens, only makes sense for the trickling step and not the preheating step.

Substituting the air jets 32 of the drying and curing section 24 of the apparatus 10 of Metzger for the ovens of Faraoni or Arakawa is not proper because the examiner is picking only one heating component (the air jets 32) of the drying and curing section 24 of Metzger while ignoring the radiant heating component (the infra-red radiant energy sources 36) of Metzger's drying and curing section 24. Metzger does not teach drying and curing (or heating) by using only directed and heated gas flows, as required by applicant's claims, but teaches drying and curing using directed and heated gas flows and infra-red radiant energy sources. The examiner's motivation for substituting the air jets of Metzger for the ovens of Faraoni or Arakawa is "the expectation of achieving a faster and more economical drying step" yet Metzger teaches the need for both the air jets and the radiant energy sources (see column 6, lines 21-27).

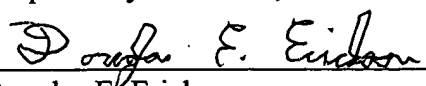
Additionally, Metzger's conveyor moves continuously (see column 5, lines 10-12) and his workpiece is a non-rotating, a plywood sheet (see column 3, lines 64-68) or the like indicating that Metzger provides only a teaching of drying and curing a continuously moving, non-rotating, sheet-like workpiece with no suggestion of using such drying and curing to preheat a stopped but rotating non-sheet-like electric coil of a workpiece.

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Further, the directed and heated gas flows in Metzger have a velocity of 6,000-8,000 feet/minute (see column 5, lines 27-30) while applicant's claims require a velocity between generally 500 and 2500 feet per minute.

Inasmuch as each of the rejections has been answered by the above remarks and amended claims, it is respectfully requested that the rejections be withdrawn, and that this application be passed to issue.

Respectfully submitted,



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